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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,226	11/17/2003	Rakesh Vig	VTI-114.9B(CIP)	5025
909	7590	03/21/2005	EXAMINER	
PILLSBURY WINTHROP, LLP			HABTE, KAHSAY	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	

1624

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/715,226	<b>Applicant(s)</b> VIG ET AL.	
	<b>Examiner</b> Kahsay Habte, Ph. D.	<b>Art Unit</b> 1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-7 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1, 4 (in part) and 7 (in part), drawn to a method of synthesizing [7-(dipropylamino)phenothiazin-3-ylidene]dipropylamino that comprises a reaction of phenothiazine with dipropyl amine in the presence of bromine, classified for example in class 544, subclass 36 and 37.
  - II. Claims 2, 4 (in part) and 7 (in part), drawn to a method of synthesizing [7-(dipropylamino)phenothiazin-3-ylidene]dipropylamino that comprises a reaction of 3,7-dibromophenothiazine-5-ium bromide or any salt of phenothiazine with dipropyl amine optionally in the presence of Copper, classified for example in class 544, subclass 36 and 37.
  - III. Claims 3 and 4 (in part), drawn to a method of synthesizing [7-(dipropylamino)phenothiazin-3-ylidene]dipropylamino that comprises (a) acetylating the ring nitrogen of 3,7-dinitrophenothiazine, (b) reduction of (a), (c) alkylation of (b), classified for example in class 544, subclass 36 and 37.
  - IV. Claims 4 (in part) and 5, drawn to a method of synthesizing [7-(dipropylamino)phenothiazin-3-ylidene]dipropylamino that comprises the step of reacting 4(-aminophenyl)dipropylamine with [2-amino-5-(dipropylamino)phenyl]thiosulfonic acid, classified for example in class 544, subclass 37 and in class 564, subclass various.

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- V. Claims 4 (in part) and 6, drawn to method of synthesizing [7-(dipropylamino)phenothiazin-3-ylidene]dipropylamino that comprises the step of reacting the (4-[[4-(dipropylamino)phenyl]amino}phenyl)dipropylamine with S, I<sub>2</sub> and DCB, classified for example in class 544, subclass 37 and in class 564, subclass various.

The inventions are distinct, each from the other because of the following reasons:

The processes of Groups I-V are distinct one from the other, and one skilled in the art would not consider the processes as equivalent to each other. Groups I-V are directed to different processes and references anticipating one invention, would not render obvious the others. For example, Group I is drawn to a reaction of phenothiazine with dipropyl amine in the presence of bromine and is different from the processes recited in Groups II-V. Group II is different from other groups, since it is drawn to a method of synthesizing [7-(dipropylamino)phenothiazin-3-ylidene]dipropylamino that comprises a reaction of dibromophenothiazine-5-ium bromide or any salt of phenothiazine compound with dipropyl amine optionally in the presence of Copper. Groups I and II are different processes because Group II requires a 3,7-dibromophenothiazine-5-ium bromide as a starting material with an optionally presence of Copper that is different from the starting material of Group I. Group III is different from Groups I-II and IV-V, since it involves an acetylation of the ring nitrogen of 3,7-dinitrophenothiazine, reduction and alkylation that is not present in other groups. The starting material for Group III is a nitrated

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phenothiazine i.e. 3,7-dinitrophenothiazine and is different from the starting materials of Groups I-II and IV-V. Group IV is different from other groups, since it comprises the step of reacting 4(-aminophenyl)dipropylamine with [2-amino-5-(dipropylamino)phenyl]thiosulfonic acid that is not present in other groups. Note that the starting material in Groups IV-V are different from the starting materials of Groups I-III, because there is no phenothiazine moiety in the starting materials of Groups IV-V. Group V is also different from Groups I-IV, because it comprises the step of making the final product by reacting a different starting material: (4-{[4-(dipropylamino)phenyl]amino}phenyl)dipropylamine with S, I<sub>2</sub> and DCB that is not present in Groups I-IV. Note that the processes in Groups I-V are independent, because they require different starting material, solvents and reaction conditions. Thus, separate searches in the literature as well as in the U.S. Patent Classification System would be required. Each process is different one from the other and could support separate patents. One skilled in the art would not consider such diverse processes equivalents of each other.

Because these inventions are distinct for the reasons given above and the search required for Group I for example is not required for Groups II-V, restriction for examination purposes as indicated is proper.

A telephone call was made to Ms. Thelma Chen Cleland on Feb. 23, 2005 to request an oral election to the above restriction requirement, but did not result in an election being made.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Note that the nomenclature of 7-(dipropylamino)phenothiazin-3-ylidene]dipropylamino is incorrect. The reactant dibromophenothiazine-5-ium bromide in claim 2 is named correctly.

### ***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kahsay Habte, Ph. D. whose telephone number is (571) 272-0667. The examiner can normally be reached on M-F (9.00AM- 5:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mukund Shah can be reached on (571) 272-0674, if there is no reply within 24 hours, James Wilson (Acting SPE) can be reached at (571) 272-0661. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

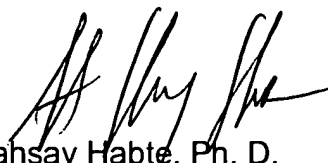
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic  
Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Kahsay Habte', is positioned above the printed name.

Kahsay Habte, Ph. D.  
Examiner  
Art Unit 1624

KH

March 15, 2005